DOCUMENT RESUME

ED 215 161 CE 031 920

AUTHOR Eliason, Nancy Carol
TITLE Equity from a Vocational Education Research Perspective. Research and Development Series No. 214E.
INSTITUTION Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, DC.
PUB DATE 81
CONTRACT 300-78-0032
NOTE 21p.; For related documents see CE 031 915-932.
AVAILABLE FROM The National Center for Research in Vocational Education, National Center Publications, Box F, 1960 Kenny Rd., Columbus, OH 43210 (RD214E, $2.35; set of 17 papers, RD214, $30.00; Equity in Vocational Education, RD213, $5.50. Quantity discounts available).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Access to Education; Demonstration Programs; *Educational Opportunities; Educational Research; *Equal Education; Equal Opportunities (Jobs); *Females; Nontraditional Occupations; *Nontraditional Students; Postsecondary Education; *Reentry Students; Sex Discrimination; *Vocational Education; Womens Education

ABSTRACT

Female participation continues to increase in postsecondary vocational education and the labor market. This growth has paralleled increased funding under the Vocational Education Amendments of 1976 for sex-equity related research and demonstration activities. Funding has not, however, kept pace with needs of institutions trying to ensure equal access to all students. Administrators must assess the financial success of sex equity programs. Institutional policy developers should reassess policies to ensure access to equity in vocational education. Hidden barriers for adult women in institutional admission practices include less financial assistance and college catalogs designed to perpetuate sex stereotyping. Reentry women have different problems than typical students do--conflict between traditional and nontraditional roles, lack of confidence in abilities--for which they require support systems. Career counselors for these women must overcome personal biases concerning womens' role in careers. Other barriers to entering nontraditional occupational training are sexual harassment, family pressures and adjustments, self-image, and parental influence. A plan for developing a program for dealing with female vocational needs should include a community-based advisory committee, workable timetable, 12 month funding, staff selection and training, outreach recruitment, selection of counseling models, financial aid options, public relations campaign, ongoing evaluation, and research component. (YLB)

ED215161

Research and Development Series No. 214E

EQUITY FROM A VOCATIONAL EDUCATION RESEARCH PERSPECTIVE

by

Nancy Carol Eliason

SUMMARY Vocational educators have grappled with equity as a problem and have espoused it as a cause since 1963 when Congress issued both an equity mandate and an equity challenge with the passage of the Vocational Education Act. This paper is one of seventeen reports commissioned by the National Center for Research in Vocational Education to meet the equity challenge through a multidisciplinary approach encompassing three perspectives—academic, vocational education, and special interest group advocacy.

The following paper describes the hidden barriers to full participation by women in vocational education programs with a particular emphasis upon the problems encountered by reentry women. The author discusses solutions to problems while describing the problems themselves and is particularly sensitive to the multiple needs of particular categories of women such as minority women, adolescent mothers, and displaced homemakers. The paper concludes with a description of the services needed to achieve equity in postsecondary vocational education.

Local postsecondary vocational institution planners have been confronted for some time with an increasingly agonizing dilemma. As they try to expand federally legislated sex equity opportunities along with a myriad of other federal, state, and local social priorities, they are faced with a constantly declining willingness and ability of sponsors to provide the funding necessary to develop these programs. The current period of double-digit inflation complicated by sharply reduced state and local funding support for vocational research and development activities is providing fewer and fewer funds, and the outlook is even more grim.

The elections of 1980 have greatly exacerbated their concerns. Not only does the incoming administration sense a mandate to reduce unproductive "welfare" spending, but it has also pledged to wield the knife of the budget cutters on many other postsecondary educational programs that have enjoyed federal largesse in the past. All too many postsecondary vocational programs have been considered campus net loss situations that could not support themselves. Hence, planners, administrators, and funders all see such programs as social rather than economic.

THE NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Linda Plister

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Unfortunately, vocational sex equity programs directed at improving the financial lot of targeted populations such as displaced homemakers, single parents, working mothers, and older women, have been unfairly and erroneously tarred with this same brush. Paradoxically, the opposite is true. Many, if not all of these programs aimed at improving the lot of the working female have proven to be significant generators of campus income (Kane 1980).

Rather than turn their backs upon such programs or throw up their hands at the lack of public funding for them, postsecondary planners and administrators would do well to examine the "quiet revolution" in female enrollments that has been building over the past decade. By the fall of 1980, females represented 52 percent of postsecondary vocational students. The presence of these more than two million women students is part of a growing phenomenon—the necessity for the majority of adult females to earn a living outside the home.

The surge of 42 million women into the work force will continue to have a dynamic impact on postsecondary vocational education throughout the 1980s. Over half of all women between the ages of eighteen and sixty-four are currently employed, and nine out of ten will work outside the home sometime during their lives. During 1977 and 1978 alone, 19 million more women joined the labor force. The August 1979 U.S. Department of Labor statistics reveal the highest female job participation in history (DOL 20 Facts on Women Workers 1979).

Preliminary projections for the decade ahead indicate a continued upswing in female participation directly tied to the national economic picture (Stechert 1980). Factors contributing to increases in female participation will include technological changes, economic imperatives, smaller families, less time-consuming domestic work, and a longer life span for women (Harness and Stromberg 1978). Most married women now live one-third of their lives after the youngest child reaches adulthood. Concurrently, housework is less demanding, and women often feel the

ABOUT THE AUTHOR

NANCY CAROL ELIASON is Director of the Center for Women's Opportunities of the American Association of Community and Junior Colleges. She has pioneered research on vocational and continuing education for disadvantaged adults in a variety of settings, from the displaced homemaker and minority single parent to women entrepreneurs. She has combined successful careers in both public and private postsecondary education. She has been actively involved in educational consulting and has provided leadership in training workshops and seminars nationwide. She has appeared on national and local television and radio and has had numerous speaking engagements at conferences and professional meetings. In addition, she currently serves on four national advisory councils and committees in education. She received a bachelor's degree in history from Mary Baldwin College and a master's degree in American civilization from the University of Maryland.

need to put their creative energies into paid work. To resolve these needs, increasingly greater numbers of women seek paid employment (Kellman and Stanley 1974).

In the last decade, a new face has appeared in the job market—the twenty-five to thirty-four year old woman. Large numbers of these females who were formerly full-time homemakers primarily involved in childbearing and childrearing now find it financially necessary to work outside the home (Manis and Machizoki 1972). To their detriment, a disproportionately high percentage of the 42 million women workers have accepted employment in dead-end, low-skill, low-paying, female intensive fields. To date, over 98 percent of all persons working for pay in private households and over 80 percent of those in clerical and secretarial fields are women. Conversely, women represent only 6 percent of all craft workers and only 25 percent of all managers. Nearly 70 percent of employed females are clustered in low-paying service, clerical, or factory work. Economic researcher Ralph Smith of the National Commission for Employment Policy argues that, "The large scale wage gap (women's salaries average only 59 percent the salaries of men) won't close until significant integration of jobs occurs." The goal of equal employment opportunity thus awaits larger numbers of females moving into male intensive fields. The solutions to problems of female job segregation are both complex and deeply rooted. Though the federal government made major gains through the implementation of civil rights legislation in the 1970s, much is still left to be done to increase equity options for all workers (Fitzgerald 1978; Galassi and Lemon 1978; Foxley 1979).

Although women enter the job market for a variety of reasons, the most compelling is economic need. Nearly two-thirds of the women in the labor force in 1978 were single, widowed, divorced, separated, or had husbands whose annual earnings were less than $10,000 (U.S. Department of Labor). Large numbers of females will find it necessary to pursue further vocational education or on-the-job training to acquire and develop skills that can be rapidly translated into higher pay. The largest gains are projected to be in high technology fields *(DOL 20 Facts on Women Workers 1979)*.

Jobs that are traditionally male dominated requiring technical, craft-oriented, or management skills hold the best prospects for females in the next decade. Among the high demand fields offering career growth potential are machine tool and die design, drafting, accounting, computer and environmental sciences. Such fields offer higher pay, greater opportunity, and a greater chance for self-fulfillment through career ladder advancement. Females of all ages need increased access to accurate information regarding occupations that are expected to grow and that offer good opportunities for pay and advancement. Although only 16 percent of employed women are now classified as professional/technical, it is anticipated that

there will continue to be a high demand in the next decade for females in the following professions: engineering, law, medicine, and architecture. There will be a declining demand for teachers and librarians. Students entering academe in the 1980s will need to know *all* of their career options to ensure economic as well as academic equity.

The rapid growth of female participation in postsecondary vocational education has paralleled increased funding under the Vocational Education Amendments of 1976 for sex-equity related research and demonstration activities. However, institutions declare that available sex equity funding has not kept pace with the needs of institutions struggling to ensure equal access to all students, particularly in the face of the multitudes of returning adult females. This absence of adequate funding is not challenged; what is challenged is the fact that women's vocational education programs cannot go forward without such funding. Administrators must carefully assess the financial success of the sex equity programs, including the female vocational courses, to ensure that they are receiving the economic support from institutional funds that they have earned.

Brandstrom (1979) urges institutional policy developers to reassess policies as well as practices to ensure access to equity in vocational education for both males and females.

Sensitive areas requiring continuing review include the following:

1. A *philosophy* that is in compliance with recent federal legislation, federal and state court decisions, and federal ED/OCR regulations. Institutional goals are reviewed annually and updated to reflect actively the changing legal commitment of postsecondary vocational education to equal access for all students. Forward-looking institutions include annual reviews in their strategic planning agendas so that funding and accreditation are not in jeopardy.

2. *Institutional commitment* includes adequate funding, staffing, time, and space. In *The Guidance Needs of Women,* Harmon (1979) urges administrators to facilitate improved support services by making a personal commitment to equal opportunity for women in education and the work force while providing formal programs for inservice development of staff.

Hidden barriers abound for adult women in institutional admissions practices. Although federal guidelines allow an institution to offer federal grants or loans or both to part-time students who enroll for at least six credit hours, many institutions do not make them available. Additionally, many women are blocked from financial assistance because they must list as "assets" their spouses' income from the

previous year even though that income, through divorce, separation, death, or incapacitation may not now be available to them. Loan options are often not realistic for females who are heads of households because of unrealistic repayment requirements. The beginning adult part-time learner who needs financial aid for a single course finds little or none available. Part-timers will continue to need tuition aid options that are devoid of penalties.

There is a need to update the comparative study of men and women receiving postsecondary financial aid that was done in 1969-70 by Cross (Furniss and Graham 1972). This study pointed out that women receive smaller grants and scholarships than men. They also take out larger loans and, if they are fortunate enough to find jobs, work for lower wages. The study further indicated that "institutional grants averaged $671 for men and $515 for women even though there was no significant difference in the socioeconomic status of women and men who participated in the study."

Various studies of adult workers indicate that if the current level of occupational equity is to be sustained and expanded, several practical approaches must be instituted. These include the following:

1. Development of more positive family and school reinforcement of self-worth and risk-taking (Midgley and Agrams 1974; Donahue 1976; Tyrrell 1976).

2. Greater emphasis in home and school on the importance of decision-making and computational skills as well as on those that develop manual dexterity (Fenneman 1974; Farmer 1978).

3. Increased emphasis upon physical fitness and competitive sports activities at an early age (Jongeward 1976).

4. Wider use of mass media to broaden public awareness of the skill pathways leading to better paid employment options (Roby 1976).

5. Communitywide campaigns to inform families of the socioeconomic facts that will confront females in the labor market in the 1980s and 1990s (Kane 1980).

A starting point for the development of open access to postsecondary vocational training should be a review of college catalogs and admissions requirements (Eliason 1977 and 1979). All too frequently catalogs utilize formats, photographs, and verbiage that perpetuate sex stereotyping.

Allen et al. (1976) offer the following suggestions for reducing sexist practices:

1. Change course titles such as "autobody repairman" to "autobody mechanic".

2. Distribute catalogs and brochures describing occupational programs without emphasis on sex stereotyping. For instance, avoid the exclusive use of "he" when referring to traditionally male programs and "she" when referring to secretarial and nursing courses.

3. Rearrange physical facilities of the classes traditionally attracting male or female students so that they are situated near each other.

4. Publicize course offerings in nontraditional locations such as beauty shops, in the women's section of newspapers, or bank mailers.

5. Increase the ratio of females to males on advisory committees. It will take counselors, teachers, administrators, students, publishers, and community leaders working together to eradicate many of the stereotypes prevalent today in employment opportunities for women.

As more and more adults return to postsecondary vocational education, the time is imminent when admissions directors will have to review their admissions requirements. Not only are many of the existing requirements somewhat threatening to female applicants, they are also youth-oriented. Many adults, both male and female, become so disillusioned with all of the required forms that they decide not to continue with their education. Cless (as quoted in Moore 1975) indicates that some admissions requirements are either irrelevant or difficult for adult students to fulfill. She has labeled some of these as "ageist roadblocks," for example, requests for letters of recommendation from recent instructors, required passing of examinations that assume that the adult applicant has been regularly and recently exposed to study skills. Additionally, the difficulty of transferring credits from one institution to another remains a major deterrent.

Brandenburg (1974) argues that tests such as the Scholastic Aptitude Test and the Graduate Record Examination may discriminate against older women because the tests assess skills that may not have been used for several years. Brandenburg suggests giving "life experience credit" for experiences outside formal education settings or using the College Level Examination Program (CLEP) and the College Proficiency Examination Program (CREP) as possible solutions to the problem of evaluating older women for admissions purposes.

Ekstrom (1977) urges that credit be assessed in a standardized manner such as the CAEL method of portfolio building for homemaking and volunteer learning experiences. Ekstrom (1979) has developed a systems approach to giving credit for prior learning in hobby, volunteer, or homemaking experiential settings.

Waters (1971) was interested in finding out how colleges and universities handled their adult (thirty years or older) applicants. She sent a questionnaire to admissions directors of fifty-eight four-year colleges and universities in five states—California, Georgia, Illinois, Massachusetts, and Michigan. Forty-five of the fifty-eight questionnaires (76 percent) were returned.

The following table summarizes responses to issues raised:

RESPONSES TO SELECTED QUESTIONS FOR ADMISSIONS PROCEDURES FOR ADULTS

(N = 44)

	YES		*NO*		*Not Answered/ Not Applicable*	
	No.	*%*	*No.*	*%*	*No.*	*%*
Do you have an upper age limit beyond which students cannot be admitted to your school as undergraduates?	1	2.3	43	97.7	0	–
Do you attempt to evaluate life experiences in deciding whether, or at what level, to admit undergraduates?	20	45.4	23	52.3	1	2.3
Does the age of applicants have any bearing on the tests they are asked to take?	10	22.7	32	72.7	2	4.5
Is there a particular admissions officer who handles all adult applicants?	9	20.5	35	79.5	0	–

Further, she noted that some institutions were using CLEP to evaluate adult applicants and giving credit for course work outside the formal classroom setting. Two institutions were using the "Quick Word Test," a vocabulary test designed to estimate an adult's mental ability. The College Qualification Test had been used by other schools. The test of Adult College Aptitude developed at Washington University had not been used at any of the responding institutions.

Brandenburg sums up her findings regarding admissions requirements for adult women as follows:

> Meeting the needs of returning women regarding admissions does not imply lowering standards or accepting all mature students. It does, however, suggest more accurate and valid consideration for the person seeking admission (1974).

In Kellman and Stanley's (1974) study of thirty reentry students at Colorado State University, 88 percent expressed a desire and a need for individual counseling as opposed to 70 percent for vocational counseling and 63 percent for academic advising. These data suggest that more women feel that they can handle academic pressures, but that other problems require specialized attention.

Reentry women have some profound problems that distinguish them from the typical student. They are torn between traditional and nontraditional roles, between their function as wife and mother and their new sense of self-worth. This conflict frequently produces feelings of guilt and turmoil.

According to several studies, the most common characteristic of the adult reentry woman is lack of confidence in her abilities. She finds herself in a general depression, accompanied by an identity crisis, and has a low self-concept and expectations (Self 1969; Elledge 1979; Arsenault 1979). The elimination of the low self-image held by women reentering college or directly entering the labor market is crucial to their success.

Needs unique to adult women result from these conflicts and insecurities. One of the most important of these needs is personal and group counseling. Such counseling increases self-awareness and self-confidence, widens investigation of occupational choices and vocational preparation, and develops a systematic approach to job search and career development. Targeted career counseling can offer needed assistance in defining personal skills and aptitudes and in correlating them to the marketplace.

Adult women need easy access to diverse and extensive support systems. These include child care, work-study, cooperative education, apprenticeship programs, back-to-school orientation, social contact with peers, and flexible

scheduling of classes or training programs. These support systems not only ease the problems of reentry, but they also make returning to school, and subsequently to the labor force, a much more attractive option.

Knefelkamp, Widick, and Stroad (1978) have developed a modification of Perry's (1970) nine-stage model for cognitive development that has important implications for equity counseling of adult males and females. Each represents a different and increasingly complex method of understanding knowledge and the learning process.

According to Farmer (1967), adult students have multidimensional abilities that are not apparent if only a single measurement tool is used. Kingsley Wientge of the University of Missouri at St. Louis (quoted in Farmer 1967) states that new measures must be devised and standardized for adults in order to assess their academic abilities. Worell (1980) and Tittle (1978) recommend that life experience be considered in the development of educational assessment programs.

Psychological maturity is the second area that institutions should consider in developing guidance modes for adult learners. As a person passes through the adult years, there is a diversification of abilities, skills, attitudes, and interests (Farmer 1967). Adult students may have a tendency to use what they know best rather than to explore new possibilities for action. Thus they tend to repeat behavioral patterns even though these may inhibit their ability to perceive effective alternatives (Nolan, Burton, and Moore 1975).

The adult's social roles comprise the third area of which instructors and counselors must be cognizant in working with older students. Social role pressures increase as adults mature. Society places high expectations on adults as they move through different age-time zones. In addition to family responsibilities, for example, adults have obligations imposed on them by their jobs, their communities, and other social institutions (Heilbrun 1976; Farmer 1978).

Only recently have researchers attempted to analyze female access and utilization patterns in postsecondary vocational education. There appear to be differences related to physical size and type of institution as well as institutional commitment. Kellman and Stanley (1974) viewed the adult female as a minority group of increasing importance.

Eliason (1977) sampled over eleven hundred females on ten two-year college campuses and found that only 22.5 percent rated counseling services as "good". Although all ten institutions offered both occupational and personal counseling, 16.5 percent of them did not know that occupational counseling was offered and an additional 16.4 percent denied that it was available. Respondents had even less

awareness of personal problem-solving services. They were stated as not available by 25.2 percent, and 33.8 percent did not know that the college offered such services. By contrast, of fourteen identifiable and common student support services, learning resource centers received the highest ratings from 55.3 percent of the respondents.

Skilled faculty advisement takes on increased importance in the equity-conscious institution. Working with professionally trained counselors, faculty can provide supportive bridges among the worlds of home, education, and work. Sensitive faculty and administrators can also provide role models for students (Harmon 1979). The demand for equal opportunity to achieve educational and career goals has been highlighted by the women's movement in efforts to diminish discriminatory job barriers (Roby 1976; Harkness and Stromberg 1978).

Mezirow (1976) cites the following reasons most frequently articulated by women returning to college: self-fulfillment, desire to enter the labor force, dissatisfaction with traditional housewife role, fulfillment of a longstanding desire to return to college, independence of children, financial needs, and job advancement. All of these issues need review by postsecondary planners.

Fossedal (1979) observes that the counselor is the link between the women and the instructional program. Therefore basic skills, attitudes, and practices need to be well understood by all who would seek to offer equity counseling. These include nonsexist attitudes, verbal skills, body language, and decision-making processes. This reaffirms the research of Braud (1967) who perceives the role of the counselor as that of a "go-between"—by assisting students to relate their educational ventures to the past, present, and future. The student personnel worker, according to Braud, must be alert to the needs of the student and be able to assess the following questions in counseling adult students:

- What do individual students want and why?
- Does this institution offer what students are seeking?
- Do their ambitions seem realistic with respect to previous experience, domestic and vocational settings, and their finances?
- Does their recent work and past indicate constructive achievement and moderate progress; or possibly confusion, poor efficiency, or self-defeating behavior?
- Do they appear informed about what they are seeking?

- Are they confident or diffident?
- Do they have any major relevant problems or handicaps?
- What administrative steps might be necessary?

If vocational counselors are to provide effective services for all adult students, they must be able to answer all of these questions and develop equity-related competencies as well.

Overcoming personal biases concerning the role of women in career occupations is imperative. As counselors become more knowledgeable, it is hoped that they will dispel such myths as:

"Women do not want to work for a woman boss."

"Women take more sick leave then men."

"Older women are unattractive and inefficient."

"Women suffer unmentionable, vague diseases in middle life." (Berry 1972)

Harway et al. (1976) identify six areas that contribute to sex discrimination in career counseling:

1. Socialization, which plays an important role in shaping the education and career decisions of young people, reflects the sex-role bias of the surrounding society.
2. The counselor training field reflects the biases and sex-role stereotypes of the larger society.
3. Training materials and training rationales reinforce existing biases or produce attitudes and values that interfere with equitable counseling practices.
4. Tests (personality, interest) and other source materials used to assess clients and assist them with their educational, vocational, and personal decisions reflect sex-role biases.
5. Negative outcomes of counseling reflected in students' educational and career decisions indicate acceptance of sex-role stereotypes.

6. Use of traditional approaches in counselor training and procedures maintains stereotypes.

These authors define sex bias in occupational counseling as any condition that limits client options solely because of gender, including limiting the expression of certain kinds of behavior that have been traditionally appropriate for one sex. Sex bias in counseling in many cases is overt; for example, the counselor suggests that a female should not enroll in math because "females are not good in math." On the other hand, sex bias can be covert, as when counselors or faculty advisors apparently commend females for excelling in jobs that are clerical in nature while they mentally reserve managerial roles for men.

A major barrier to males or females entering nontraditional occupational training is the likelihood that they will encounter sexual harassment by their fellow students or workers. Sexual harassment of females entering previously "male only" fields has continued to be a serious problem both for the women students and for their instructors. The federal government has created few incentives to encourage vocational administrators to develop human relations training programs that address both covert and overt physical and verbal abuse. Researchers indicate, however, that where two or more females enter a work site simultaneously and are given preassignment training in assertiveness as well as access to a support group, the problems are fewer (Kane et al. 1976; Heilbrun 1976). The incidence of serious abuse diminishes more rapidly when males are simultaneously given training to deal openly with their own value conflicts, fears, or prejudices regarding appropriate female roles and male-female relationsh ps. Successful programs also address the attitudinal problems that males and females bring to the workplace (Allen 1976). In nontraditional settings, Kane found that adult women who had a strong father-daughter relationship or who were encouraged by an older brother or teacher tended to be able to act more autonomously and to define ideas and decisions more assertively.

Adults who wish to enter higher paying nontraditional fields seek some sort of postsecondary occupational training to acquire the skills, credentials, and attitudes needed to survive and succeed in such fields (Worell 1980). Entrance and survival in occupational training beyond that which is needed to pursue a career result in some difficult decisions for the woman and her family. The resolution of this conflict is painfully distracting. The family senses that the woman cannot afford the time that she once took to maintain the stereotypical female role, and consequently, the family often places demands upon her that she cannot fulfill (Cord 1979).

Uncontrollable circumstances, such as competition and being a woman can also be obstacles if the career is one for which there is an oversupply of people for available jobs. Some women fear having to compete both with women in traditional

careers such as teaching and nursing and with men in nontraditional careers, notably law and medicine. Self-image was perceived as an obstacle by some men and women who had chosen nontraditional careers (Hawley 1971; Gottfredson and Holland 1975).

Many factors prevent women from training for better paying careers. A study by Denbroeder and Thomas (1979) concluded that a woman's own perceptions and pressures from the family were the two prime factors deterring women from pursuing male dominated occupations. They found that women who were seriously considering nontraditional occupations more accurately perceived the requirements and problems that exist in nontraditional settings than those who had not explored such options. Furthermore, the study showed that women who had little or no thought of entering a nontraditional field were easily deterred by family or peer pressures. Women who are interested in pioneering nontraditional occupations tend to have had working mothers. Tangri (1972), Almquist and Angrist (1971), and Kane (1976, 1978, 1980) found that over 90 percent of females enrolled in better paying, predominantly male occupations have had strong, positive relationships with male teachers, fathers, or older brothers.

Moore (1975) found that fathers had greater influence than mothers on nontraditional career choices. Mothers who opposed their daughters' choices of nontraditional careers did so because they did not want their daughters to choose "antisocial careers" such as law; or an "unfeminine career" such as physical education; or a "too different career" such as electrical technology. Societal pressures weigh heavily when women encounter hostility from family and friends concerning a nontraditional occupational choice. As Kareluis-Schumacher states in *Designing A Counseling Program for the Mature Woman Student* (1977):

> It is true that when as pivotal a family member as mother changes, the rest of the family feels the results and responds with resistance to the change. Associated with the familial tensions are guilt feelings arising from "neglecting" one's family.

Though family and friends may be verbally supportive, their actions often reflect a lack of understanding for the woman's needs, her desire to increase her job marketability, or her knowledge and expertise in a certain field (Brandenburg 1974). Farmer (1967) identified three areas that should be considered by vocational administrators who work with adult students: age, psychological maturity, and social roles. Harmon (1979) cited eight basic criteria for equity-based occupational counseling culminating in a commitment to develop effective ways to initiate recognition of real barriers in the home, the educational process, and the workplace without discouraging career exploration.

Kane (1978) found that females selecting "neutral" ocupational education, i.e., ones in which the numbers of employed females had exceeded 15 percent in recent years, such as accounting, drafting, and law enforcement had been encouraged by female teachers, parents, counselors, or a combination thereof.

Smith (as quoted in Stechert 1980) cites rapidly advancing inflation as an important factor in career choice. In two career families, the female must now bring home more than pin money to keep pace with the family's fixed expenses. The single head of a household faces even more imperative economic-related career choices. Administrators, counselors, and faculty advisors should be aware of these economic realities to prevent the "cooling out" of student career goals and thus the potential for economic self-sufficiency (Wyman and McLaughlin 1979).

Postsecondary training for nursing and allied health professions has expanded greatly during the last decade. By the mid-1980s, major changes in content and delivery styles are expected to increase equity access for males and minority women. Males enrolled in vocational nursing report some of the same sex biases as do females in the predominantly male occupations (Eliason unpublished 1977 files).

Clearly, there is a dramatic need for reassessment of the meaning of the upsurge in female vocational needs. While the financial problems of the educational institution and those of the students cannot be overlooked or dismissed, it is also evident that there is a great deal of work that needs to be done within the postsecondary vocational institution to prepare for the continuing requirements of females who are, of necessity, determined to acquire positive career skills.

A well-reasoned and well-rounded plan for developing an institutional program for dealing with these problems would include the following:

1. A community-based advisory committee
   Be sure to include potential employers and local female advocacy groups such as Business and Professional Women, American Association of University Women, Zonta, and others.

2. A workable timetable for operation
   Tying this to the institutional budgetary process is most productive. Do not try to "build Rome in a day."

3. Funding for a mininum of twelve months
   Anything less will be counter-productive. Strive to place on long-term planning agenda.

4. Staff/consultants selection and training
   This is critical to your success. There is much bias and predisposition to overcome.

5. Outreach recruitment
   A carefully selected and creative advisory committee can give you tremendous help in this area.

6. Selection of counseling models
   Beware of bias. Select a variety of models to be sure that diverse clients may be served.

7. Financial aid options for clients
   Look for local options. Major employers, on-the-job training allowances, union participation, and service clubs have been responsive to community needs in this area.

8. A public relations campaign
   Spread the word. If you have an institutional public relations officer, add that person to your advisory committee. If you do not, seek the best commercial one in town to serve on your committee.

9. Ongoing evaluation effort
   Survey your clients before and after they enter your program. Find out what works and what does not. Do not be afraid to throw out what is not working or to add something new that does.

10. A research component
    Data collection and analysis are imperative for program survival. Sponsors will not support an unsuccessful program for long, and you must be able to show that yours works.

Futurists vary in their predictions of things to come and about the nature of life in the twenty-first century. One thing they are in agreement on is the complete and equal involvement of both sexes in occupational as well as in social scenarios. The economic needs of the American family today are dictating this wave of female involvement, but failure to recognize the permanence of it could be culturally and financially disastrous to our postsecondary vocational institutions. They are the natural hospices for these women, and there is a way to serve them, with or without the federal funds of the recent past.

REFERENCES

Allen, W. C. *Corrections of Sex Discrimination and Sex Stereotyping in Education.* Tallahassee, FL: College of Education, Florida State University, 1976.

Arsenault, Anne. "Counseling Re-Entry Women in Community Colleges." *Equity Counseling for Community College Women.* Newton, MA: 1979.

Berry, J. B. "The New Womanhood: Counselor Alert." *Personnel and Guidance Journal* Vol. 51, No. 2 (1972): 105-108.

Brandenburg, Joyce B. "The Needs of Women Returning to School." *Personnel and Guidance Journal* Vol. 54 No. 1 (1974): 11-18.

Brandstrom, Janice. "The Institutional Commitment: Eliminating Barriers to Vocational Education." In C. Eliason (ed.), *Equity Counseling for Community College Women.* Newton, MA: 1979.

Braud, J. C. "The General Counselor and Counseling." In M. L. Farmer, ed., *Counseling Services for Adults in Higher Education.* Metuchen, NJ: Scarecrow Press, 1967.

Denbroeder, K. and Thomas, H. B. "Factors Deterring Women From Entering Non-Traditional Occupations." Paper presented at the *Eastern Educational Research Association* annual meeting, Kiawah Island, SC, February, 1979.

Ekstrom, R. and Eliason, C. "Documenting Life Experiences: Making Non-Traditional Experiences Work for Youth in the Job Market." Speech at May 1979 WEAL Conference, Washington, DC.

Ekstrom, R. "How to Get College Credit for What You Have Learned as a Homemaker and Volunteer." Princeton, NJ: Educational Testing Service, 1977, 1978. Eliason, N. C. "Women in Community

Eliason, N. C. "Women in Community and Junior Colleges." American Association of Community and Junior Colleges, Washington, DC: 1977.

Eliason, N. C. "Equity Counseling for Community College Women." Newton, MA: 1979.

Elledge, M. "Self-Concept of the Adult Re-entry Woman and Peer Group Counseling in the Community College." *Equity Counseling for Community College Women.* Newton, MA: 1979.

Farmer, H. S. "Why Women Choose Careers Below Their Potential." In L. S. Hansen and R. S. Rapoza (eds.), *Career Development and Counseling of Women.* Springfield, IL: Charles C. Thomas, 1978. pp. 118-131.

Farmer, M. L. (ed.) "Counseling Services for Adults in Higher Education." Metuchen, NJ: Scarecrow Press, 1967.

Fenneman, E. "Mathematics Learning and the Sexes: A Review." *Journal of Research in Mathematics Education* 5 (1974): 126-139.

Fitzgerald, L. E. "Women's Changing Expectations . . . New Insights, New Demands." In L. W. Harmon; J. M. Birk; L. E. Fitzgerald; and M. F. Tanney (eds.) *Counseling Women.* Monterey, CA: Brooks/Cole, 1978. pp 128-134.

Foxley, C. H. "Nonsexist Counseling: Helping Women and Men Redefine Their Roles." Dubuque, IA: Kendall/Hunt, 1979.

Furniss, W. T., and Graham, P. A. "Women in Higher Education." Washington, DC: American Council on Education, 1972.

Galassi, M. D., and Lemmon, M. "Life Direction Seminars: Facilitating Human Development at a Women's College." *Personnel and Guidance Journal* 57 (1978): 172-175.

Gottfredson, G. D., and Holland, J. L. "Vocational Choices of Men and Women: A Comparison of Predictors from the Self-Directed Search." *Journal of Counseling Psychology* 22 (1975): 28-34.

Harkness, K. S., and Stromberg, A. H. *Women Working.* Palo Alto, CA: Mayfield Publishing Company, 1978.

Harmon, L. W. *The Guidance Needs of Women.* Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1979.

Harway, M. "Sex Discrimination in Guidance and Counseling." *Higher Education Research Institute,* 1976.

Hawley, P. "What Women Think: Does it Affect Their Career Choice?" *Journal of Counseling Psychology* 18 (1971): 193-199.

Heilbrun, A. B. Jr. "Measurement of Masculine and Feminine Sex-role Identities as Independent Dimensions." *Journal of Consulting and Clinical Psychology* Vol. 44 (1976): 183-190.

Jongeward, D. *Women as Winners.* New York, Addison-Wesley Publishing Company, NY: 1976.

Kareluis-Schumacher, K. L. "Designing a Counseling Program for the Mature Woman Student." *Journal of the National Association for Women Deans, Administrators, and Counselors,* 1977.

Kellman, Eugenia and Stanley, Bonnie. "The Returning Woman Student: Needs of an Important Minority Group on College Campuses." *Student Development Report* Vol. 12 (1974): ED 103 747 ERIC.

Knefelkamp, L. L., Widick, C. C., and Stroad, B. "Cognitive-Developmental Theory: A Guide to Counseling Women." In *Counseling Women.* by L. W. Harmon, J. M. Birk, L. E. Fitzgerald, and M. F. Tanney (eds.). Monterey, CA: Brooks/Cole, 1978.

Manis, L. G., and Mochizuki, J. "Search for Fulfillment: A Program for Adult Women." *Personnel and Guidance Journal* Vol. 50 No. 7 (1972): 594-599.

Mezirow, J. (ed.) "An Inventory of Programs Designed for Adult Women in Community and Junior Colleges." New York, NY: Columbia University, 1976.

Midgley, N., and Agrams, M. S. "Fear of Success and Locus of Control in Young Women." *Journal of Counseling and Clinical Psychology* Vol 42 (1974): 737.

Moore, K. M. "The Cooling Out of Two-Year College Women." *Personnel and Guidance Journal* Vol. 53 No. 8 (1975): 578-583.

Roby, P. A. "Toward Full Equality: More Job Education for Women." *School Review* 84 (1976): 181-211.

Self, Gerald. "Women on the Move." Paper presented at the Continuing Education Center of Oakland University of Rochester, MI: 1969.

Stechert, K. B. "The Best Jobs for Women in the 80's." *Women's Day* 15 (January 1980): 64-66.

Tangri, S. S. "Determinants of Occupational Role Innovation Among College Women." *Journal of Social Issues* 28 (1972): 117-120.

Tittle, C. K. "Sex Bias in Testing: A Review with Policy Recommendations." Princeton, NJ: WEECN/ERIC 1978.

Tyrrell, L. A. A. "Sex Role Attitudes of Young and Returning Female Community College Students." *Dissertation Abstracts* Vol. 37, No. 6 (December, 1976): p. 3368A. (University of Michigan, 1976).

Waters, E. "The Other Generation Gap: Admissions Procedures for Adult Students." *Journal of College Student Personnel* Vol. 12 No. 6 (1971): 464-466.

Worell, J. "Gender and Sex Role Contributions to Life-Span Development." In R. Lerner, *Individuals as Contributors to Their Development: A Life-Span Perspective.* New York: Academic, 1980.

Wyman, E., and McLaughlin, M. E. "Traditional Wives and Mothers." *Counseling Psychologist* 8 (1979): 24-25.

ACKNOWLEDGMENTS

Before vocational educators can adequately meet the special needs of special groups, they must be committed to a philosophy of equitable education. The issue of equity in education has received a great deal of attention over the last ten years from the legislative, judicial, and academic sectors. As a result of this attention, research and analysis have shown that the term "equity" has a different connotation for nearly everyone who has attempted to define and apply it to educational programs. In addition, a host of related terms such as equality, disparity, and discrimination are a part of the vocational educator's daily vocabulary.

In an attempt to help vocational educators to articulate a definition of equity, the National Center for Research in Vocational Education has commissioned seventeen papers on equity from three broad perspectives—academic, vocational, and special needs. The authors in each of the three groups provide their own perceptions of and experiences with equity in education to bring vocational educators to a better understanding of this complex but timely issue.

The National Center is indebted to these seventeen authors for their contribution to furthering research on equity in vocational education.

We are also indebted to Dr. Judith Gappa, Associate Provost for Faculty Affairs at San Francisco State University for reviewing and synthesizing all seventeen papers. Special thanks also go to Cindy Silvani-Lacey, program associate, for coordinating the papers and to Regina Castle and Beverly Haynes who spent many hours typing manuscripts.

Robert E. Taylor
Executive Director

FUNDING INFORMATION

Project Title:
National Center for Research in Vocational Education, Applied Research and Development Function

Contract Number:
300780032

Project Number:
051MH10012

Educational Act Under Which the Funds Were Administered:
Education Amendments of 1976, P.L. 94-482

Source of Contract:
U.S. Department of Education
Office of Vocational and Adult Education
Washington, D.C.

Contractor:
The National Center for Research
in Vocational Education
The Ohio State University
Columbus, Ohio 43210

Executive Director:
Robert E. Taylor

Disclaimer:
This publication was prepared pursuant to a contract with the Office of Vocational and Adult Education, U.S. Department of Education. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

Discrimination Prohibited:
Title VI of the Civil Rights Act of 1964 states "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, Public Law 92-318 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, the National Center for Research in Vocational Education Project, like every program or activity receiving financial assistance from the U.S. Department of Education must be operated in compliance with these laws.

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

Robert E. Taylor
Executive Director

OSU

The Ohio State University

ORDERING INFORMATION

When ordering, please use order number and title. Orders of $10 or less should be prepaid. Make remittance payable to the National Center for Research in Vocational Education. Mail order to:

The National Center for Research
in Vocational Education
National Center Publications, Box F
1960 Kenny Road
Columbus, Ohio 43210

Prices listed are in effect at the time of publication of this book. All prices include postage and handling. Prices are subject to change without notice.

QUANTITY DISCOUNTS

Orders of five (5) or more items, as listed by publication order number and title, with a total dollar value for the order of:

$ 50 to $100, the discount is 5%
$101 to $200, the discount is 10%
$201 to $300, the discount is 15%
$301 to $400, the discount is 20%
$401 and above, the discount is 25%

INTERNATIONAL ORDERS

All orders, in any amount, from outside the United States and its possessions are to be paid in U.S. currency. Additional postage and handling charges may be added for foreign shipments, if necessary.

"PERSPECTIVES ON EQUITY" (17 papers)

Complete set of 17 papers	$30.00	RD 214
Individual papers	$ 2.35 each	RD 214A-Q
Equity from a Vocational District Director's Perspective, by Richard Adams		RD 214 A
Equity from an Economic Perspective, by Gilbert Cardenas		RD 214 B
Equity from a Public Administration Perspective, by Yearn H. Choi		RD 214 C
Equity from a Bilingual Education Perspective, by JoAnn Crandall		RD 214 D
Equity from a Vocational Education Research Perspective, by Nancy Carol Eliason		RD 214 E
Equity from a Sex Fairness Perspective, by Nancy Smith Evans		RD 214 F
Equity from a State Administrator's Perspective, by Geneva Fletcher		RD 214 G
Equity from a Special Education Perspective, by Marc Hull		RD 214 H
Equity from a Business, Industry, and Labor Perspective, by Irving Kovarsky		RD 214 I
Equity from a Racial/Ethnic Perspective, by Samuel D. Proctor		RD 214 J
Equity from a Legal Perspective, by Lisa Richette		RD 214 K
Equity from a Sociological Perspective, by Jerome Salomone		RD 214 L
Equity from an Anthropological Perspective, by Henrietta Schwartz		RD 214 M
Equity for the Disadvantaged: From a School Board Member's Perspective, by Carol Schwartz		RD 214 N
Equity from an Aging Specialist's Perspective, by N. Alan Sheppard		RD 214 O
Equity from a Large City Director's Perspective, by Lucille Campbell Thrane		RD 214 P
Equity from a Vocational Teacher Educator's Perspective, by Clyde Welter		RD 214 Q

Also Available:

Equity in Vocational Education: A Futures Agenda. Selected Presentations from the Equity Colloquium Conference held at the National Center for Research in Vocational Education, February, 1981.	RD 213 $5.50